

**United States Environmental Protection Agency
Region 7
901 N. 5th Street
Kansas City, KS 66101**

Date: 07/21/2003

Subject: Transmittal of Sample Analysis Results for ASR #: 1694

Project ID: AJA05

Project Description: Climax Molybdenum Smelter site

From: 
Dale I. Bates, Director
Regional Laboratory, Environmental Services Division

To: Jim Aycock
ARTD/RESP

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the enclosed Customer Satisfaction Survey and Data Disposition memo for this ASR.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

420625



Project Manager: Jim Aycock

Org: ARTD/RESP

Phone: 913-551-7887

Project ID: AJA05

Project Desc: Climax Molybdenum Smelter site

Location: Fort Madison

State: Iowa

Program: RCRA Enforcement

Purpose: Compliance Monitoring

Explanation of Codes, Units and Qualifiers used on this report

Sample QC Codes: QC Codes identify the type of sample for quality control purpose.

Units: Specific units in which results are reported.

___ = Field Sample
FD = Field Duplicate

mg/L = Milligrams per Liter
mg/kg = Milligrams per Kilogram

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.

U = The analyte was not detected at or above the reporting limit.

ASR Number: 1694

Sample Information Summary

07/21/2003

Project ID: AJA05

Project Desc: Climax Molybdenum Smelter site

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1 - ____		Waste	Sample collected from geotube of sludge removed from sludge pond		06/24/2003	13:50	06/24/2003	13:57	06/26/2003
1 - FD		Waste	Sample collected from geotube of sludge/Field Duplicate of sample 1		06/24/2003	13:50	06/24/2003	13:57	06/26/2003
3 - ____		Waste	Composite sample collected from small wooden tote		06/24/2003	14:05	06/24/2003	14:15	06/26/2003

ASR Number:1694

RLAB Approved Analysis Comments

07/21/2003

Project ID: AJA05

Project Desc: Climax Molybdenum Smelter site

Analysis	Comments About Results For This Analysis
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1 TCLP Metals in Haz. Waste

Lab: RECAP Contract Lab (Out-Source)

Method: Similar to EPA Region 7 RLAB Method 3122.3A Applied to TCLP extracts (see comments)

Samples: 1-__ 1-FD 3-__

Comments:

1 Total Metals of TCLP in Hazardous Samples by ICAP

Lab: RECAP Contract Lab (Out-Source)

Method: Similar to EPA Region 7 RLAB Method 3122.3A (see comments)

Samples: 1-__ 1-FD 3-__

Comments:

(N/A)

ASR Number: 1694

Project ID: AJA05

RLAB Approved Sample Analysis Results

Project Desc: Climax Molybdenum Smelter site

07/21/2003

Analysis/ Analyte	Units	1-__	1-FD	3-__
1 TCLP Metals in Haz. Waste				
Arsenic	mg/L	0.025 U	0.025 U	9.5
Barium	mg/L	0.069	0.064	0.29
Cadmium	mg/L	0.005 U	0.005 U	0.2
Chromium	mg/L	0.005 U	0.005 U	0.005 U
Lead	mg/L	0.025 U	0.025 U	1.7
Selenium	mg/L	0.59	0.61	0.26
Silver	mg/L	0.005 U	0.005 U	0.005 U
1 Total Metals of TCLP in Hazardous Samples by ICAP				
Arsenic	mg/kg	16.3	12.9	186
Barium	mg/kg	14.8	12.9	8.4
Cadmium	mg/kg	1.2 U	1.2 U	4.1
Chromium	mg/kg	25	22.9	0.51 U
Lead	mg/kg	6 U	5.8 U	149
Selenium	mg/kg	126	105	22.1
Silver	mg/kg	1.2 U	1.2 U	0.51 U

ACTIVITY LEADER(Print) Jim Aycock		NAME OF SURVEY OR ACTIVITY Climax Molybdenum		DATE OF COLLECTION 06 24 03 DAY MONTH YEAR			SHEET 1 of 1		
CONTENTS OF SHIPMENT									
SAMPLE NUMBER	TYPE OF CONTAINERS				SAMPLED MEDIA				RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	CUBITAINER	BOTTLE	BOTTLE	BOTTLE	VOA SET (2 VIALS EA)	water	soil	sediment	
NUMBERS OF CONTAINERS PER SAMPLE NUMBER									
AJA051694-1		1							
" " -1FD		1							
" " -3		1							
<div>Complete</div>									
DESCRIPTION OF SHIPMENT					MODE OF SHIPMENT				
3 PIECE(S) CONSISTING OF BOX(ES)					COMMERCIAL CARRIER:				
1 ICE CHEST(S); OTHER					COURIER				
					K SAMPLER CONVEYED (SHIPPING DOCUMENT NUMBER)				
PERSONNEL CUSTODY RECORD									
RELINQUISHED BY (SAMPLER)		DATE	TIME	RECEIVED BY		REASON FOR CHANGE OF CUSTODY			
Jim Aycock		6/25/03	1636	Nicholas Kohla		Analysis			
SEALED UNSEALED		DATE	TIME	RECEIVED BY		REASON FOR CHANGE OF CUSTODY			
SEALED UNSEALED		DATE	TIME	RECEIVED BY		REASON FOR CHANGE OF CUSTODY			
SEALED UNSEALED		DATE	TIME	RECEIVED BY		REASON FOR CHANGE OF CUSTODY			
SEALED UNSEALED		DATE	TIME	RECEIVED BY		REASON FOR CHANGE OF CUSTODY			

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 1694 Sample Number: 1 QC Code: Matrix: Solid Tag ID: 1694-1-

Project ID: AJA05 Project Manager: Jim Aycock
Project Desc: Climax Molybdenum Smelter site
City: Fort Madison State: Iowa
Program: RCRA Enforcement

Location Desc:

Storet ID: External Sample Number:

Expected Conc: (or Circle One: Low Medium High) Date Time(24 hr)
Latitude: Sample Collection: Start: 6/24/03 13:56
Longitude: End: 6/24/03 13:57

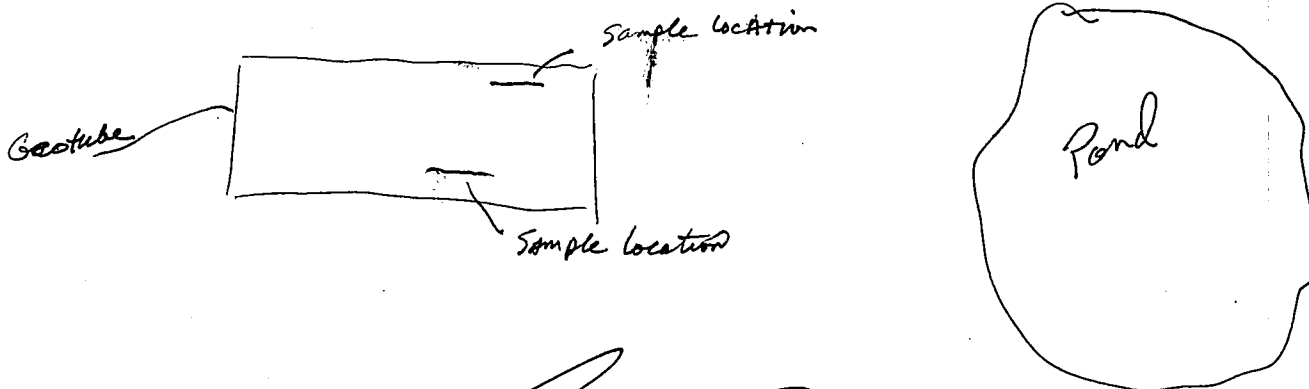
Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Total Metals Analysis of TCLP Metals in Soil ^{Waste} by ICAP
1 - 8 oz glass	4 Deg C	180 Days	1 TCLP Metals in Soil ^{Waste}

Sample Comments:

(N/A)

white/gray wet sample of Gypsum sludge. Sample collected from Geotube of sludge removed from sludge pond. Two composites used - one from each side of geotube that at 6/24/03 sample device extended to center of geotube. Sample



Sample Collected By: 

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 1694 Sample Number: 115 QC Code: FD Matrix: Solid Tag ID: 1694-115 115

Project ID: AJA05 Project Manager: Jim Aycock
Project Desc: Climax Molybdenum Smelter site
City: Fort Madison State: Iowa
Program: RCRA Enforcement

Location Desc: _____

Storet ID: _____ External Sample Number: _____

Expected Conc: _____ (or Circle One: Low Medium High) Date _____ Time(24 hr) _____

Latitude: _____

Sample Collection: Start: 6/24/03 13:50

Longitude: _____

End: 6/24/03 13:57

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 8 oz glass	4 Deg C	180 Days	1 Total Metals Analysis of TCLP Metals in Soil ^{Waste} by ICAP
1 - 8 oz glass	4 Deg C	180 Days	1 TCLP Metals in Soil ^{Waste}

Sample Comments:

(N/A)

Duplicate Sample of 7694-1

Sample Collected By: _____

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 1694 Sample Number: 3 QC Code: ___ Matrix: Solid Tag ID: 1694-3-___

Project ID: AJA05 Project Manager: Jim Aycock
Project Desc: Climax Molybdenum Smelter site
City: Fort Madison State: Iowa
Program: RCRA Enforcement

Location Desc: _____

Storet ID: _____ External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) Date Time(24 hr)
Latitude: _____ Sample Collection: Start: 6/24/03 14:05
Longitude: _____ End: 6/24/03 14:15

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis	Waste
1 - 8 oz glass	4 Deg C	180 Days	1 Total Metals Analysis of TCLP Metals in Soil by ICAP	
1 - 8 oz glass	4 Deg C	180 Days	1 TCLP Metals in Soil Waste	

Sample Comments:

(N/A)

*Gray fine material with small chunks of solid material - Reaction
Cleanout waste. Composite sample collected from a small
6/24/03 wooden tote ~ 3 ft x 3 ft x 3 ft. or about 1 cubic yard tote.*

Sample Collected By: _____

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CONTENTS OF SHIPMENT	
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DESCRIPTION OF SHIPMENT	MODE OF SHIPMENT
<u>3</u> PIECE(S) CONSISTING OF _____ BOX(ES) <u>1</u> ICE CHEST(S); OTHER _____	_____ COMMERCIAL CARRIER: _____ _____ COURIER <u>✓</u> SAMPLER CONVEYED (SHIPPING DOCUMENT NUMBER) _____

7-EPA-9262(Revised 5/85)